

April 2, 2002

Tim Quinton  
Fleetwood Motor Homes of Indiana, #91  
1010 Commerce Drive, P.O. Box 1006  
Decatur, Indiana 46733

Re: Registered Construction and Operation Status,  
**001-15175-00034**

Dear Mr. Quinton:

The application from Fleetwood Motor Homes of Indiana, Inc., received on February 8, 2002, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-5.5, it has been determined that the following, to be located at 1010 Commerce Drive in Decatur, Indiana 46733, is classified as registered:

One (1) service/repair operation, identified as (Plant #91), consisting of:

- (a) one (1) surface coating booth, identified as (A1), with particulate emissions controlled by a dry filter system, and
- (b) one (1) 3.6 MMBtu/hr natural gas fired air make-up unit, identified as (A2).

The following conditions shall be applicable:

- (1) Opacity Limitations [326 IAC 5-1-2]  
Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following:
  - (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
  - (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.
- (2) Particulate Matter (PM) Limitations [326 IAC 6-3-2]  
Pursuant to 326 IAC 6-3-2, the particulate matter (PM) emissions from the paint booth shall not exceed the limits established utilizing the following equation:

$$E = 4.10 * P^{0.67}$$

where: E = rate of emission in pounds per hour,  
P = process weight in tons per hour

This registration shall supersede CP 001-4419-00034, issued on June 23, 1995.

An authorized individual shall provide an annual notice to the Office of Air Quality that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.5-4(a)(3). The annual notice shall be submitted to:

Compliance Data Section  
Office of Air Quality  
100 North Senate Avenue  
P.O. Box 6015  
Indianapolis, IN 46206-6015

no later than March 1 of each year, with the annual notice being submitted in the format attached.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Original signed by Paul Dubenetzky

Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Quality

SDF

cc: File - Adams County  
Adams County Health Department  
Air Compliance - Dave Rice  
Permit Tracking - Janet Mobley  
Technical Support and Modeling - Michele Boner  
Compliance Data Section - Karen Nowak

<b>Registration Annual Notification</b>
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This form should be used to comply with the notification requirements under 326 IAC 2-5.5-4(a)(3).

<b>Company Name:</b>	<b>Fleetwood Motor Homes of Indiana, #91</b>
<b>Address:</b>	<b>1010 Commerce Drive</b>
<b>City:</b>	<b>Decatur, Indiana 46733</b>
<b>Authorized individual:</b>	
<b>Phone #:</b>	
<b>Registration #:</b>	<b>001-15175-00034</b>

I hereby certify that Fleetwood Motor Homes of Indiana, #91 is still in operation and is in compliance with the requirements of Registration **001-15175-00034**.

<b>Name (typed):</b>
<b>Title:</b>
<b>Signature:</b>
<b>Date:</b>

## **Indiana Department of Environmental Management Office of Air Quality**

### **Technical Support Document (TSD) for a Registered Source**

#### **Source Background and Description**

Source Name: Fleetwood Motor Homes of Indiana, #91  
Source Location: 1010 Commerce Drive, Decatur, Indiana 46733  
County: Adams  
SIC Code: 7532  
Registration No.: 001-15175-00034  
Permit Reviewer: SDF

The Office of Air Quality (OAQ) has reviewed an application from Fleetwood Motor Homes of Indiana relating to the operation of their existing motor home repair/service operation (Plant #91).

#### **Request**

On February 8, 2002, Fleetwood Motor Homes of Indiana, Inc. submitted an application to reduce the level of their permit from a construction permit to an exemption because the coatings have been changed such that the VOC and HAP potential emissions are no longer at construction permit levels.

Fleetwood Motor Homes of Indiana has two other plants in Adams County. This proposed plant (Plant #91) simply repairs and services motor homes that customers damage through use. Since there will be no exchange of any products or materials between this proposed plant and the other two, and the SIC codes of the proposed service/repair plant (7352) is different than the SIC code of the other two (3716 for both), the proposed service/repair plant is determined to be a separate source.

Proposed Plant #91 consists of one (1) service/repair operation, identified as (Plant #91), including:

- (a) One (1) surface coating booth, identified as (A1), with particulate emissions controlled by a dry filter system, and
- (b) One (1) 3.6 MMBtu/hr natural gas fired air make-up unit, identified as (A2).

All criteria pollutant emissions are less than their respective registration levels, but the worst case single HAP emissions are greater than the exempt level of 1 ton per year. Thus, this source shall be permitted via a Registration pursuant to 326 IAC 2-5.5-1(b).

#### **Existing Approvals**

The source was issued CP 001-4419-00034 on June 23, 1995. The source has been operating under this permit since its issuance.

#### **Enforcement Issue**

There are no enforcement actions pending.

#### **Recommendation**

The staff recommends to the Commissioner that the registration be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application.

## Emission Calculations

### UNRESTRICTED POTENTIAL TO EMIT DUE TO THE MODIFICATION:

The unrestricted potential to emit (UPTE) from the proposed source include PM, PM10, VOCs, and HAPs generated by the surface coating booth and combustion emissions from the air make-up unit.

The following table summarizes the UPTE from the proposed equipment. The detailed UPTE calculations follow the summary table.

Unit	PM (tons/yr)	PM10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Comb. HAPs (tons/yr)
Coating Booth	0.20	0.20	-	-	7.49	-	4.35
Air Make-up Unit	neg.	0.10	neg.	1.60	0.10	1.30	neg.
<b>Total</b>	<b>0.20</b>	<b>0.30</b>	<b>neg.</b>	<b>1.60</b>	<b>7.59</b>	<b>1.30</b>	<b>4.35</b>

#### a. Paint Booth:

The following calculations determine the PM, PM10, VOC and HAP UPTE based on use of the worst case coating, the respective maximum gal/unit, the maximum units/hr, the chemical properties of the coatings as obtained from the MSDS, emissions before controls, and 8760 hours of operation.

$$\text{VOC: VOC (tons/yr)} = \text{lb/gal} * \text{fraction VOC} * \text{gal/unit} * \text{unit/hr} * 8760 \text{ hr/yr} * 1/2000 \text{ ton/lb}$$

Coating	lb/gal	fraction VOC	maximum gal/unit	maximum unit/hr	VOC (ton/yr)
Catalyst	7.83	0.81	0.016	0.26	0.12
Reducer	7.31	1.00	0.071	0.26	0.59
Hardener	9.02	0.25	0.030	0.26	0.08
Intermix	10.47	0.50	0.090	0.26	0.54
Solvent	6.67	1.00	0.698	0.26	5.30
Coating	7.78	0.84	0.116	0.26	0.86
<b>Total</b>					<b>7.49</b>

**PM:**  $PM \text{ (tons/yr)} = lb/gal * gal/unit * unit/hr * (1 - wt\% \text{ VOC}) * (1 - 0.80) * 8760 \text{ hr/yr} * 1/2000$

Coating	lb/gal	fraction VOC	maximum gal/unit	maximum unit/hr	Transfer Fraction	PM (ton/yr)
Catalyst	7.83	0.81	0.016	0.26	0.80	0.01
Reducer	7.31	1.00	0.071	0.26	0.80	0.00
Hardener	9.02	0.25	0.030	0.26	0.80	0.05
Intermix	10.47	0.50	0.090	0.26	0.80	0.11
Solvent	6.67	1.00	0.698	0.26	0.80	0.00
Coating	7.78	0.84	0.116	0.26	0.80	0.03
<b>Total</b>						<b>0.20</b>

\* PM10 is determined to be equal to PM.

#### HAP:

The following is a summary of the source HAP emissions. The detailed calculations follow the table.

	Cobalt	Naphtha	Toluene	MEK	MIK	Isophorone	HMD*	Ethyl Benzene	Xylene	Glycol Ether
Catalyst	-	0.03	0.01	-	-	-	-	-	-	-
Reducer	-	-	0.01	0.20	0.07	-	-	-	-	-
Hardener	-	-	-	-	-	0.05	neg.	neg.	0.01	-
Intermix	-	-	-	-	-	-	-	-	-	-
Solvent	-	0.41	1.59	-	-	-	-	0.27	1.06	neg.
Coatings	neg.	-	0.22	0.04	0.02	0.01	-	0.05	0.29	0.01
<b>Total</b>	<b>neg.</b>	<b>0.44</b>	<b>1.83</b>	<b>0.24</b>	<b>0.09</b>	<b>0.06</b>	<b>neg.</b>	<b>0.32</b>	<b>1.36</b>	<b>0.01</b>

\* Hexamethylene Diisocyanate

$Tons \text{ HAP/yr} = lb/gal * fraction \text{ HAP} * gal/unit * unit/hr * 8760 \text{ hr/yr} * 1/2000 \text{ ton/lb}$

Catalyst:

DAU2:

HAP	lb/gal	fraction HAP	maximum gal/unit	maximum unit/hr	HAP (ton/yr)
Naphtha	7.83	0.20	0.016	0.26	0.03
Toluene	7.83	0.10	0.016	0.26	0.01

Reducer:

US2:

HAP	lb/gal	fraction HAP	maximum gal/unit	maximum unit/hr	HAP (ton/yr)
MEK	6.92	0.40	0.062	0.26	0.20
MIK	6.92	0.01	0.062	0.26	neg.

US3:

HAP	lb/gal	fraction HAP	maximum gal/unit	maximum unit/hr	HAP (ton/yr)
MEK	7.08	0.20	0.02	0.26	0.03
MIK	7.08	0.01	0.02	0.26	neg.

SSR521:

HAP	lb/gal	fraction HAP	maximum gal/unit	maximum unit/hr	HAP (ton/yr)
MEK	6.86	0.30	0.05	0.26	0.12
MIK	6.86	0.17	0.05	0.26	0.07

US4:

HAP	lb/gal	fraction HAP	maximum gal/unit	maximum unit/hr	HAP (ton/yr)
MEK	7.31	0.20	0.071	0.26	0.12
MIK	7.31	0.01	0.071	0.26	0.01

BS9:

HAP	lb/gal	fraction HAP	maximum gal/unit	maximum unit/hr	HAP (ton/yr)
Toluene	7.57	0.19	0.004	0.26	0.01

R7K6204:

No HAPs.

Hardener:

SSH524:

HAP	lb/gal	fraction HAP	maximum gal/unit	maximum unit/hr	HAP (ton/yr)
Isophorone	9.02	0.16	0.030	0.26	0.05

UH-80:

HAP	lb/gal	fraction HAP	maximum gal/unit	maximum unit/hr	HAP (ton/yr)
Hexamethylene Diisocyanate	9.03	0.002	0.024	0.26	neg.

V6V79:

HAP	lb/gal	fraction HAP	maximum gal/unit	maximum unit/hr	HAP (ton/yr)
Ethyl Benzene	9.04	0.02	0.011	0.26	neg.
Xylene	9.04	0.10	0.011	0.26	0.01

Intermix:

No HAPs

Solvent:

DTL16:

HAP	lb/gal	fraction HAP	maximum gal/unit	maximum unit/hr	HAP (ton/yr)
Ethyl Benzene	6.67	0.05	0.698	0.26	0.27
Toluene	6.67	0.30	0.698	0.26	1.59
Xylene	6.67	0.20	0.698	0.26	1.06

W4K157:

HAP	lb/gal	fraction HAP	maximum gal/unit	maximum unit/hr	HAP (ton/yr)
Glycol Ether	8.25	0.02	0.026	0.26	neg.

DX330:

HAP	lb/gal	fraction HAP	maximum gal/unit	maximum unit/hr	HAP (ton/yr)
Toluene	6.36	0.05	0.067	0.26	0.02
Naphthalene	6.36	0.85	0.067	0.26	0.41

Coatings:

U7:

HAP	lb/gal	fraction HAP	maximum gal/unit	maximum unit/hr	HAP (ton/yr)
Ethyl Benzene	7.78	0.05	0.116	0.26	0.05
Xylene	7.78	0.28	0.116	0.26	0.29



BCS605:

HAP	lb/gal	fraction HAP	maximum gal/unit	maximum unit/hr	HAP (ton/yr)
Ethyl Benzene	7.24	0.09	0.028	0.26	0.02
Xylene	7.24	0.51	0.028	0.26	0.12

P2A43:

HAP	lb/gal	fraction HAP	maximum gal/unit	maximum unit/hr	HAP (ton/yr)
Toluene	10.09	0.31	0.003	0.26	0.01
MIK	10.09	0.06	0.003	0.26	neg.

988:

HAP	lb/gal	fraction HAP	maximum gal/unit	maximum unit/hr	HAP (ton/yr)
Ethyl Benzene	6.68	0.01	0.003	0.26	neg.
Xylene	6.68	0.06	0.003	0.26	neg.
MIK	6.68	0.22	0.003	0.26	0.01
Toluene	6.68	0.03	0.003	0.26	neg.

CC633:

HAP	lb/gal	fraction HAP	maximum gal/unit	maximum unit/hr	HAP (ton/yr)
MEK	7.89	0.16	0.028	0.26	0.04
MIK	7.89	0.09	0.028	0.26	0.02

U7300:

HAP	lb/gal	fraction HAP	maximum gal/unit	maximum unit/hr	HAP (ton/yr)
Cobalt Compounds	7.59	0.001	0.003	0.26	neg.

P6A47:

HAP	lb/gal	fraction HAP	maximum gal/unit	maximum unit/hr	HAP (ton/yr)
Toluene	11.47	0.23	0.019	0.26	0.06
Xylene	11.47	0.05	0.019	0.26	0.01
MIK	11.47	0.02	0.019	0.26	neg.

E6H59:

HAP	lb/gal	fraction HAP	maximum gal/unit	maximum unit/hr	HAP (ton/yr)
Ethyl Benzene	11.23	0.01	0.004	0.26	neg.
Xylene	11.23	0.08	0.004	0.26	neg.
Toluene	11.23	0.06	0.004	0.26	neg.

E6C61:

HAP	lb/gal	fraction HAP	maximum gal/unit	maximum unit/hr	HAP (ton/yr)
Ethyl Benzene	8.06	0.03	0.033	0.26	0.01
Xylene	8.06	0.16	0.033	0.26	0.05
Toluene	8.06	0.24	0.033	0.26	0.07
MEK	8.06	0.07	0.033	0.26	0.02

BCS-600:

HAP	lb/gal	fraction HAP	maximum gal/unit	maximum unit/hr	HAP (ton/yr)
Ethyl Benzene	7.25	0.06	0.069	0.26	0.03
Xylene	7.25	0.32	0.069	0.26	0.18
Toluene	7.25	0.38	0.069	0.26	0.22

**b. Air Make Up Unit:**

The following calculations determine the air make-up unit emissions based on natural gas combustion, a combined maximum capacity of 3.6 MMBtu/hr, AP-42 emission factors, emissions before controls, and 8760 hours of operation.

$$3.6 \text{ MMBtu/hr} * 8760 \text{ hr/yr} * 1 \text{ E6 Btu/MMBtu} * 1/1000 \text{ cf/Btu} * 1/1\text{E6 MMcf/cf} * \text{Ef lb poll/MMcf} * 1/2000 \text{ ton poll/lb poll} = \text{ton poll/yr}$$

	PM 7.6 lb/MMcf	PM10 7.6 lb/MMcf	SO2 0.6 lb/MMcf	NOx 100 lb/MMcf	VOC 5.5 lb/MMcf	CO 84 lb/MMcf
ton/yr	neg.	0.10	neg.	1.60	0.10	1.30

**EMISSIONS AFTER CONTROLS:**

Only the PM overspray emissions are controlled. These emissions are controlled by dry filters with a control efficiency of 95%. The following calculations determine the emissions after controls.

$$\begin{aligned} \text{Emissions After Controls (tons/yr)} &= \text{Emissions Before Controls (tons/yr)} * (1 - 0.95) \\ &= 0.20 \text{ tons PM(PM10)/yr} * 0.05 \\ &= 0.01 \text{ ton PM(PM10)/yr} \end{aligned}$$

Unit	PM (tons/yr)	PM10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Comb. HAPs (tons/yr)
Coating Booth	0.01	0.01	-	-	7.49	-	4.35
Air Make-up Unit	neg.	0.10	neg.	1.60	0.10	1.30	neg.
<b>Total</b>	<b>0.01</b>	<b>0.11</b>	<b>neg.</b>	<b>1.60</b>	<b>7.59</b>	<b>1.30</b>	<b>4.35</b>

## Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA.”

This table reflects the PTE before controls from the source based on the above estimated emissions calculations. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	0.20
PM-10	0.30
SO <sub>2</sub>	neg.
VOC	7.49
CO	1.30
NO <sub>x</sub>	1.60

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

Pollutant	Potential To Emit (tons/year)
Cobalt Compounds	neg.
Naphtha	0.44
Toluene	<b>1.83</b>
MEK	0.24
MIK	0.09
Isophorone	0.06
Hexamethylene Diisocyanate	neg.
Ethyl Benzene	0.32
Xylene	1.36
Glycol Ether	0.01
Total Combined HAPs	<b>4.35</b>

The worst case single HAP UPTE exceeds the exempt level of 1 ton per year, but is less than 10 tons per year, all criteria pollutant UPTE are less than their 25 tons per year, and the combined HAP UPTE is less than 25 tons/yr. Therefore, the source qualifies for a Registration pursuant to 326 IAC 2-5.5-1(b).

## County Attainment Status

The source is located in Adams County.

Pollutant	Status
PM <sub>10</sub>	attainment or unclassifiable
SO <sub>2</sub>	attainment or unclassifiable
NO <sub>2</sub>	attainment or unclassifiable
Ozone	attainment or unclassifiable
CO	attainment or unclassifiable
Lead	attainment or unclassifiable

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Adams County has been designated as attainment or unclassifiable for ozone. Therefore, the VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration, 326 IAC 2-2 and 40 CFR 52.21.
- (b) Adams County has been classified as attainment or unclassifiable for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Fugitive Emissions

Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive PM emissions are not counted toward determination of PSD and Emission Offset applicability.

## Source Status

New Source PSD Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

	PM (tons/yr)	PM10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Worst Case Single HAP (tons/yr)	Comb. HAPs (tons/yr)
<b>Source</b>	<b>0.01</b>	<b>0.11</b>	<b>neg.</b>	<b>1.60</b>	<b>7.59</b>	<b>1.30</b>	<b>1.83</b>	<b>4.35</b>
PSD Levels	250	250	250	250	250	250	-	-
Part 70 Levels	-	100	100	100	100	100	10	25

- (a) This new source is not a major PSD stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more and it is not one of the 28 listed source categories.
- (b) This new source is not a Title V major stationary source because no criteria pollutant potential to emit (PTE) exceeds the applicable level of 100 tons/yr, no single hazardous air pollutant PTE exceeds the applicable levels of 10 tons/yr, and the combined hazardous air pollutant PTE does not exceed the applicable level of 25 tons/yr.

## **Federal Rule Applicability**

### **New Source Performance Standards (NSPS):**

40 CFR 60, Subpart MM, Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations:

40 CFR 60, Subpart MM does not apply to the proposed source because the proposed source is not an automobile or light duty truck assembly operation.

### **National Emission Standards for Hazardous Air Pollutants (NESHAPs):**

There are no National Emission Standards for Hazardous Air Pollutants (326 IAC 14 and 20 and 40 CFR Part 61 and 63) that apply to this proposed source.

## **State Rule Applicability**

### **Entire State Rule Applicability**

#### **326 IAC 2-4.1 (HAP Major Sources)**

This source is not subject to the requirements of 326 IAC 2-4.1 because no single hazardous air pollutant (HAP) emissions exceed 10 tons per year, and the combined HAP emissions are less than 25 tons per year.

#### **326 IAC 2-6 (Emission Reporting)**

This source is not subject to 326 IAC 2-6 (Emission Reporting), because it is not in one of the listed counties, and it does not emit more than 100 tons per year of any regulated pollutants.

#### **326 IAC 5-1-2 (Opacity Limitations)**

Opacity shall not exceed an average of 40% in any one 6 minute averaging period. Opacity shall not exceed 60% for more than a cumulative total of fifteen minutes.

## **Individual State Rule Applicability**

#### **326 IAC 6-3 (Process Operations), Paint Booth:**

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) emissions from the paint booth shall not exceed the limits established utilizing the following equation:

$$E = 4.10 * P^{0.67}$$

where: E = rate of emission in pounds per hour,  
P = process weight in tons per hour

#### **326 IAC 8-2-9 (Miscellaneous Metal Coating Operations)**

This paint booth is not subject to 326 IAC 8-2-9 because the coatings are applied to fiberglass, not metal.

326 IAC 8-2-2 (Automobile and Light Duty Truck Coating Operations):

326 IAC 8-2-2 does not apply to the proposed coating booth because the proposed source is a repair/service operation, not an automotive or light duty truck assembly operation.

326 IAC 8-10 (Automobile Refinishing):

326 IAC 8-10 does not apply because the proposed source is not located in any of the applicable counties (Clark, Floyd, Lake, Porter, or Vanderburgh counties).

326 IAC 8-1-6 (State BACT Requirements):

Although no other Article 8 rules apply, 326 IAC 8-1-6 does not apply because the booth potential VOC emissions are less than the applicable level of 25 tons per year.

**Conclusion**

This existing motor home repair/service plant shall be operated according to the requirements specified in **Registration 001-15175-00034**.